

Patent Claims

Process for Determining the Stress Capacity of a Person

1. Process for determining the stress capacity of a person while taking into consideration the individual anaerobic threshold by measuring lactate concentrations in dependence upon the work performed, characterized by the process steps of
 - measuring the time-dependent lactate concentration changes above the individual anaerobic threshold,
 - adjusting a measured curve to the obtained measured values in which the lactate concentration is recorded with respect to time,
 - determining a first rise in the measured curve in one of the individual anaerobic thresholds according to time point t_{IAT} ,
 - determining at least one more rise from the measured curve at a time point t_x , with $t_x > t_{IAT}$, and
 - subtracting the second rise from the first rise for determining a difference ΔA .

2. Process according to claim 1,
characterized in that
the differences ΔA_x with $x = 1, 2, \dots$ are recorded with respect to the effort and the
measured curves formed in this way are compared with standard curves, measured curves
of different persons, or measured curves of the same person at different stress times.
3. Process according to claim 1 or 2,
characterized in that
the measured curves are measured during a staged effort change of the person.
4. Process according to at least one of the preceding claims,
characterized in that
the measured curves are measured during a continuous effort change of the person.
5. Process according to at least one of the preceding claims,
characterized in that
the subtraction parameter determined by Stegmann for determining the difference ΔA is
used as individual anaerobic threshold.